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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/816,171	04/02/2004	Peter Hesse	250924US0CONT	7879

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OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.  
1940 DUKE STREET  
ALEXANDRIA, VA 22314

EXAMINER
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WYROZEBSKI LEE, KATARZYNA I

ART UNIT	PAPER NUMBER
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1714

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	03/21/2007	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 03/21/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/816,171	<b>Applicant(s)</b> HESSE ET AL.	
	<b>Examiner</b> Katarzyna Wyrozebski	<b>Art Unit</b> 1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 February 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 31-129 is/are pending in the application.
- 4a) Of the above claim(s) 73-129 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 31-72 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 31-129 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/20/07; 3/8/05</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election with traverse of Group I in the reply filed on 2/20/2007 is acknowledged. The traversal is on the ground(s) that non elected claims would not impose serious burden on the examiner. This is not found persuasive because as many processes as the applicants claim that may be used to make the powder are in itself very distinct processes. With respect to the applicant's arguments regarding groups V and VI, if claims 31, 34 and 55 are found allowable, the examiner will reconsider re-joining the claims of Group V. The claims of Group VI are product by process claims, wherein the patentable weight is given to the product and not to the process by which it is made. These claims will not be rejoined since the applicants are already pursuing product claims. Applicant's response to the restriction requirement further contained attachment from a book. This attachment cannot be considered since it is in german language.

The requirement is still deemed proper and is therefore made FINAL.

### ***Claim Objections***

2. Claim 33 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. In the instant case, claim 33 recited spherical shape of the PEEK powder, which is already a limitation of claim 31.

3. Claim 50 is objected to since it depends on claim 51.

### ***Double Patenting***

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned

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with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 31-72 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-13 of copending Application No.

10/593,573. Although the conflicting claims are not identical, they are not patentably distinct from each other because the co-pending application discloses a powder comprising PEEK polymer and fibers embedded therein. The co-pending application further discloses matrix polymer that is PA11 or PA12 as well as amounts of the fibers and particle size of the powder.

In the light of the above disclosure, it would have been obvious to one having ordinary skill in the art that while practicing the claims of the present invention one would arrive at the claims of co-pending application and vice-versa.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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7. Claims 1-3, 47, 48, 51, 52, 67, 68, 71, 72 are rejected under 35 U.S.C. 102(b) as being anticipated by LUCKE (US 5,247,052).

LUCKE discloses PEEL powder having particle size of less than 70 microns. The prior art of LUCKE also discloses that the VICTREX PEEK powders (still produced today) have particle size of about 100 microns (col. 1).

In the light of the above disclosure the prior art of LUCKE anticipates limitations of claims rejected above.

8. Claims 1-3, 47, 48, 51, 52, 67, 68, 71, 72 are rejected under 35 U.S.C. 102(b) as being anticipated by SCHOENGERR (US 5,910,558).

SCHOENGERR discloses micropowders comprised of PEEK. The diameter of the powder is up to 100 microns (col. 2, lines 1-11). The particle size distribution can be directed to large or small particles where on one hand the particles can be 2-70 microns and on the other 1-10 microns. Specific formula of SCHOENGERR is I<sub>15</sub> col. 5 and 6 of the prior art.

Prior art of SCHOENGERR also teaches filler embedded in the powder that includes inorganic material such as silica or alumina in amount of 0.1-20 wt % (col. 11). The powder is utilized in coating applications with other thermoplastic polymers.

In the light of the above disclosure, the prior art of SCHOENGERR anticipates claims rejected above.

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9. Claims 31-37, 39-42, 46-48, 50-52, 54-57, 59-63, 66-68, 70-72 are rejected under 35 U.S.C. 102(b) as being anticipated by THORNE (US 5,370,911).

Thorne discloses process where the particles of PEEK are deposited onto fibers. The entire surface area of the fiber is covered with polymer. The amount of fiber is in a range of 10-80 wt % and the amount of the polymer is in a range of 20-90 wt %. Particle diameter is 1-40 wt % (Abstract).

In the light of the above disclosure the prior art of THORNE anticipates requirements of claims rejected above.

### ***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

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4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

12. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

13. Claims 31-72 are rejected under 35 U.S.C. 103(a) as being unpatentable over SCHOENGERR (US 5,910,558) in view of THRONE (US 5,370,911).

The discussion of the disclosure of SCHOENGERR from paragraph 8 of this office action is incorporated here by reference.

The difference between the present invention and the disclosure of SCHOENGERR is encapsulation of fibers instead of particulates.

The disclosure of THORNE from paragraph 9 of this office action is incorporated here by reference.

Use of fibers instead of particulates in the composition of SCHOENGERR would still produce the same type of the particles as long as the particle size or length of the diameter is within the same range as those of particulate filler. The amount of filler would depend on the intended use of the powder.



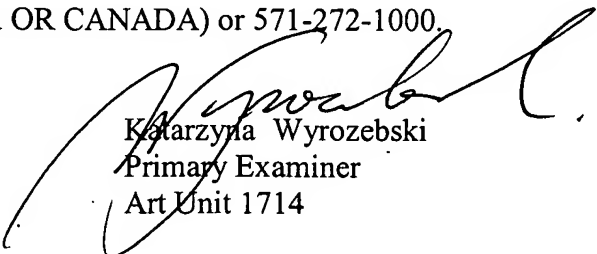
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In the light of the above disclosure it would have been obvious to one having ordinary skill in the art at the time of the instant invention to utilize short fibers instead of particulates and thereby obtain the claims invention. Small fibers embedded in PEEK would still produce the same powder.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Katarzyna Wyrozebski whose telephone number is (571) 272-1127. The examiner can normally be reached on Mon-Thurs 6:30 AM-4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Katarzyna Wyrozebski  
Primary Examiner  
Art Unit 1714

March 15, 2007